Item No. 6

Planning and Development Services Memo

December 1, 2008

TO: **Mayor and City Council**
Kevin Burke, City Manager

THROUGH: Mark Landsiedel, Community Development Director
Jim Cronk, Planning Director

FROM: Roger E. Eastman, AICP, Zoning Code Administrator

RE: **December 23, 2008 Work session**
Background and overview of the Land Development Code (LDC) and the RFP process to select a consultant to assist with the rewrite of the LDC

Background:
On September 5, 2008 as part of a City Council "orientation", staff presented a very brief overview of the Land Development Code (LDC) and Request for Proposals (RFP) written to select a consultant to assist staff with the rewrite of the LDC.

The purpose of the December 23rd work session is to provide the City Council with additional information on the LDC and the RFP that includes:

- A brief explanation of why the LDC requires updating and amendment (includes an overview of its strengths and weaknesses);
- A summary of the contents of the Request for Proposals (RFP) released on July 18, 2008;
- A brief introduction to Smart Growth, Traditional Neighborhood Development (TND) and Form-Based Codes;
- Background information on the process followed by the Selection Committee who reviewed the responses to the RFP; and,
- A general introduction to Opticos Design Inc. and their team who have been selected by the Selection Committee as the preferred firm to assist with the rewrite of the LDC.

Why the need to update the Land Development Code?
The City of Flagstaff Planning and Development Services Section invited qualified planning consultants, urban designers and multi-disciplinary firms to submit a written proposal in response to a Request for Proposals (RFP) to provide professional services for the purpose of restructuring and redrafting the existing City of Flagstaff zoning ordinance to create an innovative and integrated zoning ordinance based on Smart Growth principles.

The City of Flagstaff's zoning ordinance or Land Development Code (LDC) is adopted in accordance with Arizona Revised Statutes in order to further the legislative intent of "*protecting and promoting the public health, safety and general welfare of the citizens of Flagstaff, providing for orderly growth*", etc. (LDC Division 10-01-002).

The purpose of the LDC is further established in Division 10-01-003, and may be summarized as:

- Furthering the legislative intent, i.e. protecting the public health, safety and general welfare of the citizens of Flagstaff;
- Organizing all the regulations for the development of land within the City;
- Organizing the regulations in "*a form which is comprehensive, straightforward, and easily understood and usable*";
- The implementation of the adopted General Plan (i.e. Flagstaff Area Regional Land Use and Transportation Plan or Regional Plan).

The LDC in its current format is a complex document because it includes numerous zoning methodologies that have been added to it over the past few years. These include:

- Conventional use-based zoning provisions that date back to the 1970s and before;
- Performance-based zoning provisions added in 1991 (these establish the allowed development potential of a property based on how it "performs" with regard to such natural features as slopes, forest (tree) resources and/or floodplains). The 1991 performance-based code revisions also combined the former zoning ordinance and subdivision ordinance from the City Code into a consolidated Land Development Code (LDC). The LDC was restructured and formatted at that time. The original 17 conventional zoning districts were retained and are identified as "Established" or "E" districts, for example, the C-3-E (Highway Commercial District Established) zoning district. In addition, 18 new zoning districts were added. These districts do not have the "E" designation (for example, UC (Urban Commercial district)), and they are applied through the application of performance-based zoning techniques developed by Lane Kendig and Associates.
- Design review guidelines to better address site and building design adopted in 2002 that apply to multi-family residential, commercial, institutional and business park developments; and
- Traditional neighborhood standards based on the Smart Code requiring a form-based code for a Traditional Neighborhood District adopted in November 2007. (These codes regulate urban form expressed through building placement and street design primarily rather than regulating use as a primary consideration).

Since 1991 the LDC has been amended numerous times to resolve conflicts, add new provisions, and ensure consistency with Arizona statutes. In addition, over the past few years three overlay historic zoning districts have been adopted as well as the Traditional Neighborhood District, and most recently, impact fees.

The City of Flagstaff LDC has a number of strengths as summarized below:

- It provides regulations for the control and orderly use of land within the City;
- It ensures that incompatible uses are separated;
- It provides administrative processes and procedures;
- It provides for the health, safety and general welfare of the community;
- It includes good ideas for the preservation of trees and to provide flexibility specific to a use or a parcel;
- The City's lighting standards have protected Flagstaff's night skies and resulted in the City being the first International Dark Sky City; and
- It provides numerous tools that have allowed staff and the City Council to creatively address the challenge of providing affordable housing in the community.

In its day (1991), the LDC was a progressive zoning ordinance that incorporated leading edge planning ideas with the adoption of certain performance-based zoning concepts. However, the LDC also has numerous weaknesses, as summarized below:

- While the LDC is certainly comprehensive, it is not in "a *form which is comprehensive, straightforward, and easily understood and usable".* Indeed, the LDC's complex concepts and standards as well as its weak organizational structure have made it very hard for citizens and staff to use the document.
- The LDC is essentially a Euclidian or conventional code that separates land uses into distinctly different land use categories. In its current format of segregating land uses it illustrates a general lack of relevancy and unresponsiveness to address new market directions and emerging trends within the planning profession and development community, such as Smart Growth and the promotion of mixed-use concepts that have been proven in many cities across the US.
- The LDC can be difficult to use and interpret, especially as it includes both Euclidian and performance-based provisions.
- Numerous amendments over the years have led to a disjointed code that lacks good internal or external cross references. It is also not logically organized and many development standards are hard to find.
- In general the LDC lacks consistency with the Regional Plan, and in some respects fails to implement it properly.
- Some provisions (such as the measurement of building height and the method for determining tree preservation on a parcel) produce results inconsistent with community goals.
- In general the LDC lacks consistency, clarity and predictability. This has been a frequent concern to citizens and developers.
- The LDC includes an unnecessary number of zoning districts – 39 in total with 32 actually mapped on the zoning map (both "Established" and "new" created in 1991).
- As noted above, the majority of the LDC is at least 17 years old (some parts are much older).

In summary, the LDC requires modernization, codification and improvement. The desired zoning ordinance (it will have a new name) will be coherent, integrated, concise, consistent, innovative, and user friendly.

An Overview of the Request for Proposals (RFP) for the LDC Rewrite:
Based on research of other communities and recently published planning documents, City staff has determined that a desired zoning code for the City of Flagstaff should embrace the following five key objectives:

1. It must be **comprehensive**, and cover the following topics;
   a. Community character – in terms of land use, density, design of the public realm, building design and preservation of heritage resources.
   b. Natural resources and the environment – protection of local ecological systems, native trees and vegetation, slope and floodplain resources and wildlife corridors.
   c. Housing choices – affordability, jobs/housing balance, access.
   d. Promote sustainable building and development practices.
   e. Transportation and mobility – address all modes, and provide choices for all residents including pedestrians.
   f. Safety and security – protection from natural and man-made disasters and crime mitigation.

g. Energy and utilities – production using alternate sources (wind and solar), distribution and conservation, water conservation, etc.
h. Economic development – to enable the expansion of existing businesses, and promote new markets and growth.
i. Food systems – local supply, healthy foods, urban food production.

2. It must **artfully and intelligently integrate** natural and man-made systems;

3. It must be **progressive**, drawing upon the useful features of other code types already proven and in use, for example in the areas of design, coding, procedures, incentives, etc.;

4. It must be based on a **sustainable and comprehensive policy plan** and long term **civic engagement**; and,

5. It must be **tailored** to local and regional climate, ecology, history and culture.

The purpose of the RFP released on July 18, 2008 was to select a planning consultant to produce an innovative and integrated zoning code for the City of Flagstaff that uses the existing provisions of the LDC expanded, modified and deleted as necessary within the restrictions of applicable State law to produce a zoning code that;

1. Is based on sound principles of Smart Growth, mixed-use and sustainable development. (See the narrative below for more information on this subject).

2. Is consistent with the adopted Regional Plan and is coordinated with the future amendments proposed to the Regional Plan.

3. Is logically organized and easy to read and understand.

4. Includes an extensive use of graphics to illustrate key points and minimize the amount of text.

5. Is consistent in terms of processes and requirements.

6. Reduces the number of zoning districts provided in the Code and on the zoning map where possible, by combining or removing districts.

7. Involves the public in a meaningful and effective way using appropriate public participation techniques.

8. Is easily expanded and amended in the future to respond to changing market and socio-economic conditions.

The work program as described in the RFP involves a comprehensive assessment and analysis of the LDC so that strategies for the restructuring and redrafting of the Code can be recommended. A review and assessment of applicable Arizona revised statutes relative to the LDC is also contemplated within this first phase. The first phase would be followed by the drafting of a revised and reformatted zoning ordinance inclusive of revised procedures, revised zoning districts, detailed regulations, a revised zoning map, etc, and the identification of areas within the City where Form-Based Codes could be completed. A public participation plan must be included as part of the response to the RFP explaining how the public will be informed and involved throughout the process of rewriting the LDC.

In November 2006, Arizona voters approved Proposition 207 which has now been incorporated into the Arizona statutes in Sections 12.1131 – 12.1138. The RFP also specifically required the successful consultant planning team to understand the possible implications of these statutes as they apply to the reassignment of zoning districts, rezoning of property, and the possible amendment of existing development standards.

The RFP anticipates that the scope of work for this project will be completed in three phases, generally described as follows:

Phase 1: A comprehensive assessment and analysis of the City's existing zoning ordinance (LDC) for the purpose of recommending strategies for the restructuring and redrafting of the Code. A review and assessment of applicable Arizona revised statutes relative to the LDC is also contemplated within this phase.

Phase 2 Involves the drafting of a revised and reformatted zoning ordinance inclusive of revised procedures, revised zoning districts, detailed regulations, a revised zoning map, etc., and as further explained below, the identification of areas within the City where Form-Based Codes could be completed.

Phase 3 Completion of a Form-Based Code for at least one area of the City.

A Brief Overview of Smart Growth:
In 1996, the U.S. Environmental Protection Agency joined with several non-profit and government organizations to form the Smart Growth Network. The Network was formed in response to increasing community concerns about the need for new ways to grow that boost the economy, protect the environment, and enhance community vitality. The Network's partners include environmental groups, historic preservation organizations, professional organizations, developers, real estate interests; local and state government entities.

"*Growth is smart when it gives us great communities, with more choices and personal freedom, good return on public investment, greater opportunity across the community, a thriving natural environment, and a legacy we can be proud of to leave our children and grandchildren*". (Smart Growth Network)

Smart Growth as promoted by the Smart Growth Network is based on the following principles:

a. Mix land uses.
b. Take advantage of compact building design.
c. Create a range of housing opportunities and choices.
d. Create walkable neighborhoods.
e. Foster distinctive, attractive communities with a strong sense of place.
f. Preserve, open space, farmland, natural beauty, and critical environmental areas.
g. Strengthen and direct development towards existing communities.
h. Provide a range of transportation choices.
i. Make development decisions, predictable, fair and cost effective.
j. Encourage community and stakeholder collaboration in development decisions.

Smart Growth principles when properly applied in a community provide a number of important benefits that can include:

1. New development adds value to a community.
2. Cities and towns get the most return from their investment in new development.

3. Residents have a variety of transportation choices – walking, biking, transit and driving – to get to convenient amenities (e.g. schools, libraries, shops and restaurants).
4. A mix of housing and neighborhood types meets the needs of couples, singles, families and seniors.
5. Greater opportunities for the preservation of open space.
6. Development and urban growth patterns that is more sustainable than conventional development.

A Brief Overview of Traditional Neighborhood Development:
The term Traditional Neighborhood Development (TND) has been utilized in planning and development circles within the City since November 2001 when the Regional Plan was adopted. Indeed, the Regional Plan contains numerous references to, and actively promotes the use of, Traditional Neighborhood Developments and mixed use development. Examples include, Policy LU1.11 (*Place emphasis on and encourage Traditional Neighborhood development and redevelopment design*) and Policy LU1.5 (*Provide for new mixed-use neighborhoods*).

In December 2007 the City Council adopted the Traditional Neighborhood District (Chapter 10-17 of the LDC) to allow TNDs in Flagstaff. Incentives to promote TNDs are also provided in the Land Development Code in Chapter 4 (housing affordability and tree preservation). Further information on TNDs and New Urbanism is provided in Appendix C of the LDC, a copy of which is attached.

The design of neighborhoods based on traditional concepts of place making is at the heart of the movement called the "New Urbanism". is in, which can be defined by 13 elements, according to town planners Andres Duany and Elizabeth Plater-Zyberk, who founded the architecture and town planning firm Duany Plater-Zyberk & Co. (DPZ), and who are also two of the founders of the Congress for the New Urbanism (www.cnu.org). These elements are also included in the Regional Plan.

A Quick Look at Form Based Codes:
"*Form-Based Codes (FBCs) have been developed specifically to empower communities both to enable and to require better development patterns and individual projects. They are a cutting-edge tool for helping improve the quality of the built environment and our communities, as well as for fighting sprawl and all its detrimental effects.*" (Form-Based Codes; A Guide for Planners, Urban Designers, Municipalities and Developers – Daniel G. Parolek AIA, Karen Parolek & Paul C. Crawford, FAICP, John Wiley and Sons, 2008.) As defined by the Form-Based Code Institute, a "*Form-Based Code is a method of regulating development to achieve a specific urban form. Form-Based codes create a predictable public realm by controlling physical form primarily, with a lesser focus on land use, through city or county regulations*".

Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes, presented in both diagrams and words, are keyed to a *regulating plan* that designates the appropriate form and scale (and therefore, character) of development rather than only distinctions in land-use types. This is in contrast to conventional zoning's focus on the segregation of land-use types, permissible property uses, and the control of development intensity through simple numerical parameters (e.g., Floor Area Ratio, dwellings per acre, height limits, setbacks, parking ratios). Not to be confused with design guidelines or general statements of policy, form-based codes are regulatory, not advisory.

Form-based codes are drafted to achieve a community vision based on time-tested forms of urbanism. Ultimately, a form-based code is a tool; the quality of development outcomes is dependent on the quality and objectives of the community plan that a code implements.

Further information on FBCs is in Appendix C of the LDC, a copy of which is attached. Also attached is a copy of the foreword written by Stefanos Polyzoides to the above referenced book on FBCs which provides useful information on why FBCs have revolved as an important planning tool and the essential principles of FBCs.

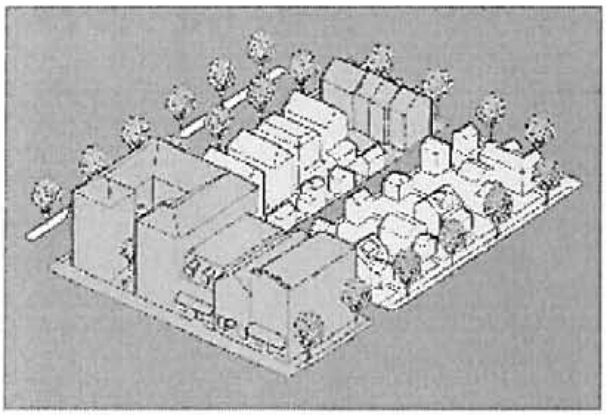

Illustration of possible development with a FBC

Selection Committee Review of Responses to the RFP:
Staff developed a Request for Proposals (RFP) by the LDC rewrite project based on the guidelines and template for RFPs available on the American Planning Association's web page as well as RFPs put out by other City's for similar projects. On July 18, 2008 the RFP was posted on the City of Flagstaff web page, as well as the web pages for the American Planning Association, Congress for the New Urbanism and the Form-Based Code Institute. Additionally, the RFP was mailed to a number of planning firms who staff knew were qualified to complete this project.

A pre-proposal conference call was held on August 12th with representatives from 19 firms to answer their questions and provide them with additional information on the RFP. On the submittal deadline for proposals at 3:00 pm on September 2, 2008, a total of nine firms had submitted responses to the RFP.

The responses to the RFP for this project were reviewed in depth by a Selection Committee made up of the following individuals:

- Roger E. Eastman, AICP, CNU — Zoning Code Administrator
- Jim Cronk — Planning Director
- Mark Sawyers, AICP, CNU — Project Management Supervisor
- Bob Caravona, AICP — Advanced Planning Manager
- Celia Barotz — Chairperson, Planning and Zoning Commission

James Speed, Senior Assistant City Attorney, while not a formal member of the Selection Committee, attended most of the interviews with the prospective consultants and provided useful comment to the Committee.

Following a comprehensive review and analysis of all submitted proposals, three teams were selected for interviews in early October. Unfortunately, after these three interviews the Selection Committee was not satisfied that any of the teams were sufficiently qualified or experienced to work on the complex LDC rewrite project. It was eventually agreed that it would be appropriate and fair to invite all of the remaining firms to the City for interviews with the Selection Committee. Over a three to four week period ending in early November, the remaining teams interviewed with the Selection Committee. This proved to be an extremely rewarding experience, albeit somewhat time-consuming, and very quickly two teams were obviously the

right choice and fit for this project. After further review and discussion and making calls to the references provided, the Selection Committee finally recommended Opticos Design, Inc as the preferred planning consultant to work with staff on the LDC rewrite project.

Opticos Design Inc.

Opticos Design Inc. was founded in 2000 by Daniel and Karen Parolek, with the intent of establishing "*a practice that combined town planning and architecture to elevate the design, implementation, and revitalization of great urban places*". Under Daniel's leadership, an award winning team of professionals has been assembled to work on the City of Flagstaff LDC rewrite project that includes:

OPTICOS

Opticos Design, Inc.

- Opticos Design Inc. The lead consultant who will lead the creation of the Form-Based Code components, manage the public process, and complete any urban design or visualization that might be necessary;
- Lisa Wise of Lisa Wise Consulting and Bruce Jacobson of Jacobson & Wack will lead the team in the LDC rewrite effort and will participate with Opticos Design in the Form-Based Code component to ensure that the it fits appropriately into the final code;
- Tiffany & Bosco, PA Land use attorneys based in the Phoenix area who will enable the team to appropriately address the Arizona-specific legal planning aspects of the code rewrite, especially in relation to Prop 207;
- Sherwood Design Engineers brings a strong component of sustainability to the final code in terms of green infrastructure, green streets, and green buildings;
- Rick Hall of Hall Engineering & Planning will create thoroughfare standards for the selected Form-Based Code focus areas. Rick's firm has worked in Flagstaff on the Juniper Point project and provided assistance to staff on the TND Ordinance;
- Two Flagstaff locals, Kristen Dacey Iwai and Keiji Iwai, will be a local resource whose photography will be used to reinforce the unique, local, natural and urban character of Flagstaff within the code.

Using an approach that has been tested in numerous other communities, the Opticos Design Inc. team propose to create a zoning code that applies the best practices of Form-Based Coding to select areas of the City, in combination with a more conventional, but graphically oriented and user-friendly update of the rest of the code.

Two of the firm's principals, Daniel Parolek and Karen Parolek are co-founders of the Form-Based Code Institute and wrote the book "Form-Based Codes" with Paul Crawford published by Wiley Press and released in March 2008. The core team has worked on various projects together including the Form-Based Code for Downtown Benicia, California, which won the 2007 Driehaus Form-Based Code Award, and is currently working on the Development Code Update and City-wide FBC for Livermore, California.

Opticos Design intend to apply a similar approach to the Flagstaff LDC rewrite project to that used in integrating FBCs within a complete Development Code update in such communities as Grass Valley, CA and in Livermore, CA. The final product will be an easy-to-use development code that reinforces the unique character of Flagstaff and a sustainable future through the

application of FBCs were appropriate, but that also allows conventional development to function in designated special districts.

More information on Opticos Design, Inc. is available on their website www.opticosdesign.com.

Next Steps on the Path Forward:
The City Council is currently scheduled to consider awarding a contract to Opticos Design Inc. for an amount not to exceed $500,000 for the rewrite of the LDC on January 6, 2009. Staff is currently working with this firm to finalize the scope of work and to resolve a few outstanding issues in this complex project. The official start date for the contract is proposed to be February 1, 2009. Considerable progress is being made to initiate base-mapping with the City's GIS section, to provide the consultant with copies of the LDC and Regional Plan, zoning and land use maps, etc.

Attachments:

- Appendix C to the LDC that provides background information on Smart Growth, Traditional Neighborhood development, Form-Based Codes, etc.

- Foreword to the book "Form-Based Codes; A Guide for Planners, Urban Designers, Municipalities and Developers" – Daniel G. Parolek AIA, Karen Parolek & Paul C. Crawford, FAICP, John Wiley and Sons, 2008 written by Stefanos Polyzoides.

If you have questions on the proposed rewrite of the Land Development Code, or require additional information, please contact Roger E. Eastman AICP, Zoning Code Administrator at (928) 779-7631 Ext. 7606 or via e-mail at reastman@ci.flagstaff.az.us.

APPENDIX C:

ADDITIONAL INFORMATION ON SMART GROWTH AND TRADITIONAL NEIGHBORHOOD DEVELOPMENTS

Note: This entire Appendix was adopted by Ordinance No. 2007-42, 11-20-2007.

1.0 What is Smart Growth?

"*Growth is smart when it gives us great communities, with more choices and personal freedom, good return on public investment, greater opportunity across the community, a thriving natural environment, and a legacy we can be proud of to leave our children and grandchildren*". (Smart Growth Network)

Smart Growth as promoted by the Smart Growth Network (www.smartgrowth.org) is based on the following principles:

a. Mix land uses.
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Smart Growth principles when properly applied in a community provide a number of important benefits that can include:

- New development adds value to a community
- Cities and towns get the most return from their investment in new development.
- Residents have a variety of transportation choices – walking, biking, transit and driving – to get to convenient amenities (e.g. schools, libraries, shops and restaurants).
- A mix of housing and neighborhood types meets the needs of couples, singles, families and seniors.
- Greater opportunities for the preservation of open space.
- Development and urban growth patterns that is more sustainable than conventional development.

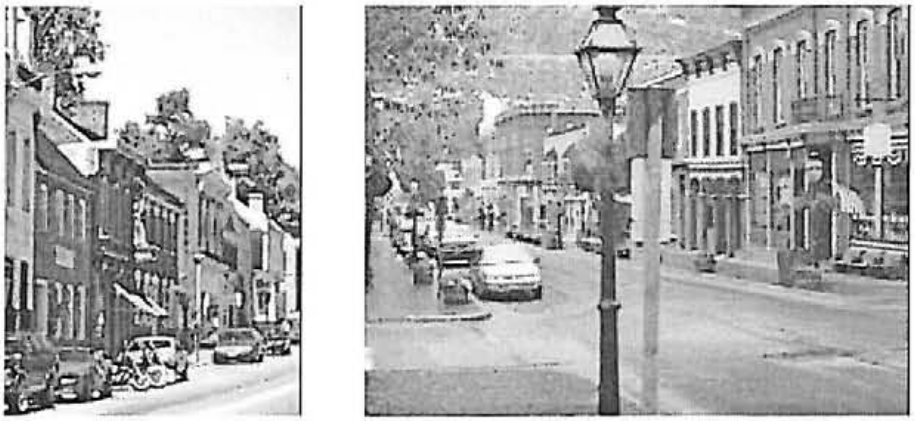
2.0 What is New Urbanism and Traditional Neighborhood Development?

The term Traditional Neighborhood Development (TND) has been utilized in planning and development circles within the City since November 2001 when the Flagstaff Area Regional Land Use and Transportation Plan was adopted. Indeed, the Regional Plan contains numerous references to, and actively promotes the use of, Traditional Neighborhood Developments. Incentives to promote TNDs are also provided in the Land Development Code in Chapter 4.

New Urbanism emerged over the past two decades in response to the urban sprawl that has characterized development in most parts of America. From its earliest roots, the

United States developed in the form of compact, mixed-use neighborhoods up to the first quarter of the last century. Urban development patterns began to change with the emergence of modern architecture and zoning and the expanded use of the automobile. Following World War II, neighborhoods were replaced with development patterns that separated land uses, i.e. conventional suburban development (CSD), or sprawl.

New Urbanism is an approach to urban planning and design that can be applied at a variety of scales, moving from a single block in an urban area to a large metropolitan region. At the neighborhood level, New Urbanism is often referred to as Traditional Neighborhood Development because it revives the urban form and character of US cities and towns built from the 1600s until World War II.



Early mixed-use compact traditional neighborhood development in the United States

New Urbanist developments do not seek to mimic past patterns of development. Instead, New Urbanist or Traditional Neighborhood developments strive to reinterpret the qualities of old patterns of building placement, design, and public spaces to suit modern living needs, including of course the needs of the automobile.

A new traditional neighborhood recently completed in Denver, CO

New Urbanism and Traditional Neighborhood developments are based on principles of planning and architecture that work together to create human-scale, walkable, functional and sustainable communities. They can be applied to either infill projects within a city, communities proposed on the periphery of cities, projects focused on transit-oriented development (TOD), or even entire cities.

From modest beginnings, the New Urbanism movement is now having a substantial impact on development in the US. More than 600 new towns, villages, and neighborhoods are planned or under construction in the US, using the principles of the

New Urbanism. Additionally, hundreds of small-scale new urban infill projects are restoring the urban fabric of cities and towns by reestablishing walkable streets and blocks. Many Gulf Coast communities ravished by Hurricanes Katrina and Rita are rebuilding themselves based on these principles.

Principles of Traditional Neighborhood Development

The heart of the New Urbanism is in the design of neighborhoods, which can be defined by 13 elements, according to town planners Andres Duany and Elizabeth Plater-Zyberk, who founded the architecture and town planning firm Duany Plater-Zyberk & Co. (DPZ), and who are also two of the founders of the Congress for the New Urbanism (www.cnu.org).

An authentic neighborhood should contain most of these elements:

1) The neighborhood has a discernible center. This is often a square or a green and sometimes a busy or memorable street corner. A transit stop would be located at this center.
2) Most of the dwellings are within a five-minute walk of the center, an average of roughly 2,000 feet.
3) There are a variety of dwelling types — usually houses, rowhouses and apartments — so that younger and older people, singles and families, the poor and the wealthy may find places to live.
4) At the edge of the neighborhood, there are shops and offices of sufficiently varied types to supply the weekly needs of a household.
5) A small ancillary building is permitted within the backyard of each house. It may be used as a rental unit or place to work (e.g., office or craft workshop).
6) An elementary school is close enough so that most children can walk from their home.
7) There are small playgrounds accessible to every dwelling -- not more than a tenth of a mile away.
8) Streets within the neighborhood form a connected network, which disperses traffic by providing a variety of pedestrian and vehicular routes to any destination.
9) The streets are relatively narrow and shaded by rows of trees. This slows traffic, creating an environment suitable for pedestrians and bicycles.
10) Buildings in the neighborhood center are placed close to the street, creating a well-defined outdoor room.
11) Parking lots and garage doors rarely front the street. Parking is relegated to the rear of buildings, usually accessed by alleys.
12) Certain prominent sites at the termination of street vistas or in the neighborhood center are reserved for civic buildings. These provide sites for community meetings, education, and religious or cultural activities.
13) The neighborhood is organized to be self-governing. A formal association debates and decides matters of maintenance, security, and physical change. Taxation is the responsibility of the larger community.

The City of Flagstaff has some wonderful older traditional neighborhoods like the Old Town Site Neighborhood, Southside neighborhood, and the neighborhoods to the north and northwest of the Downtown area. These neighborhoods, as well as the Downtown area itself, provide a wealth of planning and architectural patterns that can be interpreted and applied in other areas of the City through the application of Traditional Neighborhood developments.

Photographs showing some architectural elements that reflect the City of Flagstaff's mountain architectural vernacular.

Artist renderings showing the urban character of this proposed TND project (Juniper Point) reflecting the City of Flagstaff's mountain architectural vernacular, with a corner store on the left, and a residential street on the right.
Illustrations by Dover, Kohl & Partners

3.0 SmartCode

The SmartCode is a model unified land development ordinance for planning and urban design. It is the property of Duany Plater-Zyberk & Co. (DPZ) but may be freely reproduced and used with proper credit given to DPZ. The SmartCode incorporates Smart Growth and New Urbanism principles, Transect-based planning, environmental and zoning regulations, and regional, community and building-scaled design outcomes. It is a tool that guides the form of the built environment to resemble that of traditional neighborhoods, towns and villages. As noted previously, this form is compact, walkable, and mixed-use, and it is meant to be comfortable, safe and ecologically sustainable. As a model code, the SmartCode is intended to be calibrated or customized to the specific region within which it is applied by professional urban designers, planners, architects, engineers and other professionals, with the participation of local citizens.

The SmartCode may be downloaded for free from http://smartcodecentral.com/.

The principles of Smart Growth and Traditional Neighborhood development are addressed in the SmartCode at the scale of the Region, the Community, the Block and the Building, and the Transect as provided below. This text is taken from the SmartCode and has been adapted to Flagstaff. Note that Capitalized terms used throughout this section may refer to Section 10-14-005-0001 Definitions of Terms for Traditional Neighborhood Districts.

The Region

a. That the its natural infrastructure and visual character derived from its unique location in Northern Arizona, and its topography, forests, farmlands, and riparian corridors.
b. That growth strategies should encourage Infill and redevelopment in parity with New Communities.
c. That development contiguous to Urban areas should be structured in the Neighborhood pattern and be integrated with the existing urban pattern.
d. That development non-contiguous to Urban areas should be organized in the pattern of traditional Neighborhoods.
e. That affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.
f. That the planning and reservation of transportation corridors should be coordinated with land use planning.
g. That open space green corridors should be used to define and connect urbanized areas.
h. That the region should include a framework of transit, pedestrian, and bicycle systems that provide alternatives to the automobile.
i. That natural resources should be preserved by encouraging the concentration of development in mixed-use higher density Neighborhoods than might otherwise be permitted under existing zoning.

The Community.

a. That Neighborhoods should be coordinated, compact, pedestrian-oriented, and mixed-use.
b. That Neighborhoods should be the preferred pattern of development and that districts specializing in single-use should be the exception.
c. That ordinary activities of daily living should occur within walking distance of most dwellings, allowing independence to those who do not drive.
d. That interconnected networks of Thoroughfares should be designed to disperse and reduce the length of automobile trips.
e. That within Neighborhoods, a range of housing types and price levels should be provided to accommodate diverse ages and incomes.
f. That appropriate building Densities and land uses should be provided within walking distance of transit stops.
g. That Civic, Institutional, and Commercial activity should be embedded in Downtowns or other planned Neighborhood centers, not isolated in remote single-use complexes.
h. That schools should be sized and located to enable children to walk or bicycle to them.
i. That a range of useable open space including Parks, Squares, and Playgrounds should be distributed within Neighborhoods and Urban zones.

j. That public trails within Neighborhoods should link to the existing regional trail system.

The Block and the Building.

a. That buildings and landscaping should contribute to the physical definition of Thoroughfares as Civic places.
b. That development should adequately accommodate automobiles while respecting the pedestrian and the spatial form of public space.
c. That the design of Thoroughfares and buildings should reinforce safe environments, but not at the expense of accessibility.
d. That architecture and landscape design should grow from local climate, topography, history, and building practice and therefore respect and support Flagstaff's unique forest and mountain environment and architectural vernacular.
e. That buildings should provide their inhabitants with a clear sense of geography and climate through energy efficient methods.
f. That Civic Buildings and public gathering places should be located in places that reinforce community identity and support self-government.
g. That Civic Buildings should be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the city.
h. That the preservation and renewal of historic buildings should be facilitated to affirm the continuity and evolution of society
i. That the harmonious and orderly evolution of urban areas should be secured through the adoption of Form-based Codes that serve as guides for change for the proposed Traditional Neighborhood District. The Form-based Code establishes land use regulations for the district that may be different from zoning regulations applicable to other zoning districts in the Land Development Code or any other approved Traditional Neighborhood District.

4.0 Transect-Based Planning

The SmartCode provides a detailed overview of the transect from an ecological perspective, and how transects can also be applied in an urban-to-rural context. As this concept is critical in understanding the application of the SmartCode to the proposed Traditional Neighborhood District in the City of Flagstaff, a brief overview of transect-based Planning is provided below.

A transect or geographical cross-section of nature was first conceived by Alexander Von Humboldt near the end of the 18th century. Originally it was used to map and analyze different ecological environments that showed different characteristics through different zones, such as ocean shores, dunes, wetlands, plains, and uplands or mountains.

Human beings also live in different places such as metropolitan areas, cities, suburbs, towns and farms. New Urbanists have applied the principle of the natural transect to describe a range of environments that can be arranged from the most natural to the most urban as illustrated in the diagram below. The SmartCode and the Traditional Neighborhood District established in Chapter 17 of the Land Development Code is based upon six Transect Zones which describe the physical character of place at any scale according to its density and intensity of Urbanism. Each Transect Zone has its own unique rules for physical design that address for example, such issues as building Placement, streetscape design, and Setback requirements. The Transect Zones are:

a. **T1 Natural Zone** – consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.

b. **T2 Rural Zone** consists of sparsely settled lands in open or cultivated state. These include woodland, grasslands, Parks and Open Space areas. Typical buildings are farmhouses, agricultural buildings or cabins.

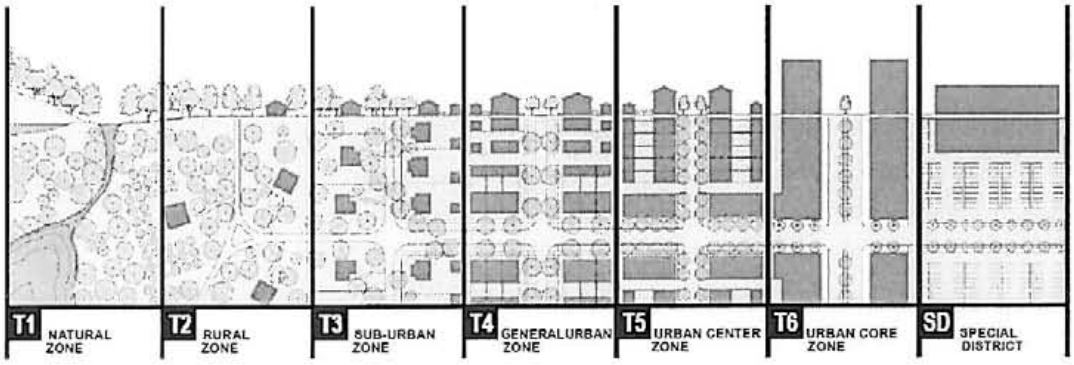
c. **T3 Sub-Urban Zone** consists of low-density residential areas, adjacent to higher density zones that include some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and Setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.

d. **T4 General Urban Zone** consists of Mixed-use but primarily Residential urban fabric. It may have a wide range of building types, such as single-family, Sideyard, and Rowhouses. Setbacks and landscaping are variable. Streets with Curbs and Sidewalks define medium-sized Blocks.

e. **T5 Urban Center Zone** consists of higher Density Mixed-use buildings that accommodate Retail, Offices, Rowhouses and apartments. It has a tight network of streets and small Blocks, with wide Sidewalks, regularly spaced street planting, and buildings set close to the Sidewalks.

f. **T6 Urban Core Zone** consists of the highest Density and height, with the greatest variety of Uses, and Civic buildings of regional importance. It may have larger Blocks, and streets have regularly spaced tree planting with buildings set close to the wide Sidewalks. The T6 Urban Core is typically associated with Downtown Flagstaff, thus this Transect would not be applied in other locations within the City. (See Table 1)

g. **Special Districts** consist of areas with buildings that by their Use, Placement or Configuration cannot, or should not, conform to one or more of the six normative Transect Zones.



A TYPICAL RURAL-URBAN TRANSECT, WITH TRANSECT ZONES

5.0 What is a Form-based Code?

The description of a Form-based Code (FBC) provided below is copied from the Form-based Code Institute with their permission, and may be accessed from their web site – www.formbasedcodes.org/.

A Form-based Code is a method of regulating development to achieve a specific urban form. Form-based codes create a predictable public realm by controlling physical form primarily, with a lesser focus on land use, through city or county regulations.

Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes, presented in both diagrams and words, are keyed to a *regulating plan* that designates the appropriate form and scale (and therefore, character) of development rather than only distinctions in land-use types. This is in contrast to conventional zoning's focus on the segregation of land-use types, permissible property uses, and the control of development intensity through simple numerical parameters (e.g., Floor Area Ratio, dwellings per acre, height limits, setbacks, parking ratios). Not to be confused with design guidelines or general statements of policy, form-based codes are regulatory, not advisory.

Form-based codes are drafted to achieve a community vision based on time-tested forms of urbanism. Ultimately, a form-based code is a tool; the quality of development outcomes is dependent on the quality and objectives of the community plan that a code implements.

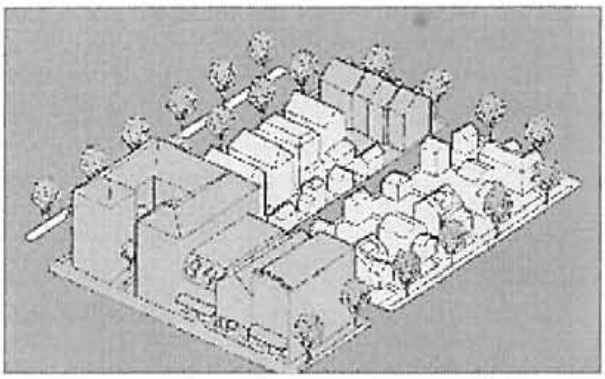


Illustration of possible development with a FBC

Form-based codes commonly include the following elements:

- *Regulating Plan.* A plan or map of the regulated area designating the locations where different building form standards apply, based on clear community intentions regarding the physical character of the area being coded.
- *Building Form Standards.* Regulations controlling the configuration, features, and functions of buildings that define and shape the public realm.
- *Public Space/Street Standards.* Specifications for the elements within the public realm (e.g., sidewalks, travel lanes, street trees, street furniture, etc.).
- *Administration.* A clearly defined application and project review process.
- *Definitions.* A glossary to ensure the precise use of technical terms.

Form-based codes also sometimes include:

- *Architectural Standards.* Regulations controlling external architectural materials and quality.

- *Annotation.* Text and illustrations explaining the intentions of specific code provisions.

Eight Advantages to Form-Based Codes

1. Because they are prescriptive (they state what you want), rather than proscriptive (what you don't want), form-based codes (FBCs) can achieve a more predictable physical result. The elements controlled by FBCs are those that are most important to the shaping of a high quality built environment.

2. FBCs encourage public participation because they allow citizens to see what will happen where-leading to a higher comfort level about greater density, for instance.

3. Because they can regulate development at the scale of an individual building or lot, FBCs encourage independent development by multiple property owners. This obviates the need for large land assemblies and the mega-projects that are frequently proposed for such parcels.

4. The built results of FBCs often reflect a diversity of architecture, materials, uses, and ownership that can only come from the actions of many independent players operating within a communally agreed-upon vision and legal framework.

5. FBCs work well in established communities because they effectively define and codify a neighborhood's existing "DNA." Vernacular building types can be easily replicated, promoting infill that is compatible with surrounding structures.

6. Non-professionals find FBCs easier to use than conventional zoning documents because they are much shorter, more concise, and organized for visual access and readability. This feature makes it easier for non-planners to determine whether compliance has been achieved.

7. FBCs obviate the need for design guidelines, which are difficult to apply consistently, offer too much room for subjective interpretation, and can be difficult to enforce. They also require less oversight by discretionary review bodies, fostering a less politicized planning process that could deliver huge savings in time and money and reduce the risk of takings challenges.

8. FBCs may prove to be more enforceable than design guidelines. The stated purpose of FBCs is the shaping of a high quality public realm, a presumed public good that promotes healthy civic interaction. For that reason, compliance with the codes can be enforced, not on the basis of aesthetics but because a failure to comply would diminish the good that is sought. While enforceability of development regulations has not been a problem in new growth areas controlled by private covenants, such matters can be problematic in already-urbanized areas due to legal conflicts with first amendment rights.

~ Peter Katz, President, Form-Based Codes Institute

6.0 A Brief Overview of Design Charrettes

This synopsis of design Charrettes is taken from a publication written by Bill Lennertz called "The Charrette as an Instrument of Change", and published in *New Urbanism: Comprehensive Report & Best Practices Guide*, 3rd Edition, Ithaca NY: New Urban Publications, 2003. Pp. 12-2 to 12-8. Additional information is also available from the National Charrette Institute web site -- www.charretteinstitute.org.

A Charrette is a multi-day planning process during which an interdisciplinary professional design team creates a complete and buildable plan (typically based on Smart Growth and Traditional Neighborhood principles) that reflects the input of all stakeholders who are involved by engaging them in a series of feedback loops. It is a comprehensive and intensive planning process to bring transformative change to a neighborhood or planning area.

As Mr. Lennertz states, "charrettes offer much more than just a quick fix", and they result in lasting, transformative change. A Charrette requires a carefully planned and orchestrated process that starts well before the actual Charrette and continues long after it.

The National Charrette Institute (NCI) suggests that there are nine strategies that differentiate an authentic Charrette from other planning processes. Further information on these strategies is available at the NCI website.

1. Work collaboratively
2. Design cross-functionally
3. Use design to achieve a shared vision and create holistic solutions
4. Work in detail
5. Constrain work schedules
6. Communicate in short feedback loops
7. Work for at least four to seven consecutive days
8. Work on site
9. Produce a buildable plan

7.0 Thoroughfares (i.e. Streets) in Traditional Neighborhoods

There is an extensive amount of information available on the subject of Context Sensitive Design and the design of streets to promote walkability and safety for pedestrians. An excellent resource on this subject can found in a Chapter titled Designing Streets for Walkability and Safety by various authors in the book *New Urbanism: Comprehensive Report & Best Practices Guide*, 3rd Edition, Ithaca NY: New Urban Publications, 2003. Pp. 8-1 to 8-30.

The following introduction to this subject is excerpted from the above referenced book, Pp. 8-1 to 8-2 in the Chapter titled Designing Streets for Walkability and Safety by various authors.

A Traditional Neighborhood Development (TND) is a human scale, walkable community with moderate to high residential densities and a mixed use core. Compared with conventional suburban developments, TNDs have a higher potential to increase modal split by encouraging and accommodating alternate transportation modes. TNDs also have a higher potential for capturing internal trips, thus reducing vehicle miles traveled.

Example of a street designed to promote walkability and safety for pedestrians.
Photo by Rick Hall

A dense network of narrow streets with reduced curb radii is fundamental to TND design. This network serves to both slow and disperse vehicular traffic and provide a pedestrian friendly atmosphere. Such alternate guidelines are encouraged by North Carolina Department of Transportation when the overall design ensures that non-vehicular travel is to be afforded every practical accommodation that does not adversely affect safety considerations. The overall function, comfort, and safety of a multipurpose or "shared" street are move important than its vehicular efficiency alone.

TNDs have a high proportion of interconnected streets, sidewalks, and paths. Streets and rights-of-way are shared between vehicles (moving and parked), bicycles, and pedestrians. The dense network of TND streets functions in an interdependent manner, providing continuous routes that enhance non-vehicular travel. Most TND streets are designed to minimize through traffic by the design of the street and the location of land uses. Streets are designed to only be as wide as needed to accommodate the usual vehicular mix for that street while providing adequate access for moving vans, garbage trucks, fire engines, and school buses.

8.0 On-line Resources for Smart Growth and Traditional Neighborhood Developments

SMART GROWTH:
http://www.smartgrowth.org/about/default.asp?res=1024

TRADITIONAL NEIGHBORHOOD DEVELOPMENT:
http://www.tndtownpaper.com/neighborhoods.htm

http://safety.fhwa.dot.gov/ped_bike/univcourse/swless06.htm

http://www.newurbannews.com/

http://www.tndhomes.com/feature.htm

http://www.preservenet.com/politics/NewUrb.html

http://fullyarticulated.typepad.com/sprawledout/2007/06/traditional_nei.html

CONGRESS FOR THE NEW URBANISM:
http://www.cnu.org/

TRANSECT:
http://www.dpz.com/transect_articles.htm

FORM BASED CODES:
http://www.formbasedcodes.org/

SMARTCODE:
http://www.smartcodecentral.com

DESIGN CHARRETTES:
http://www.charretteinstitute.org

CONTEXT SENSITIVE SOLUTIONS:
http://www.contextsensitivesolutions.org/

http://www.fhwa.dot.gov/csd/index.cfmh/

http://www.ite.org/css/

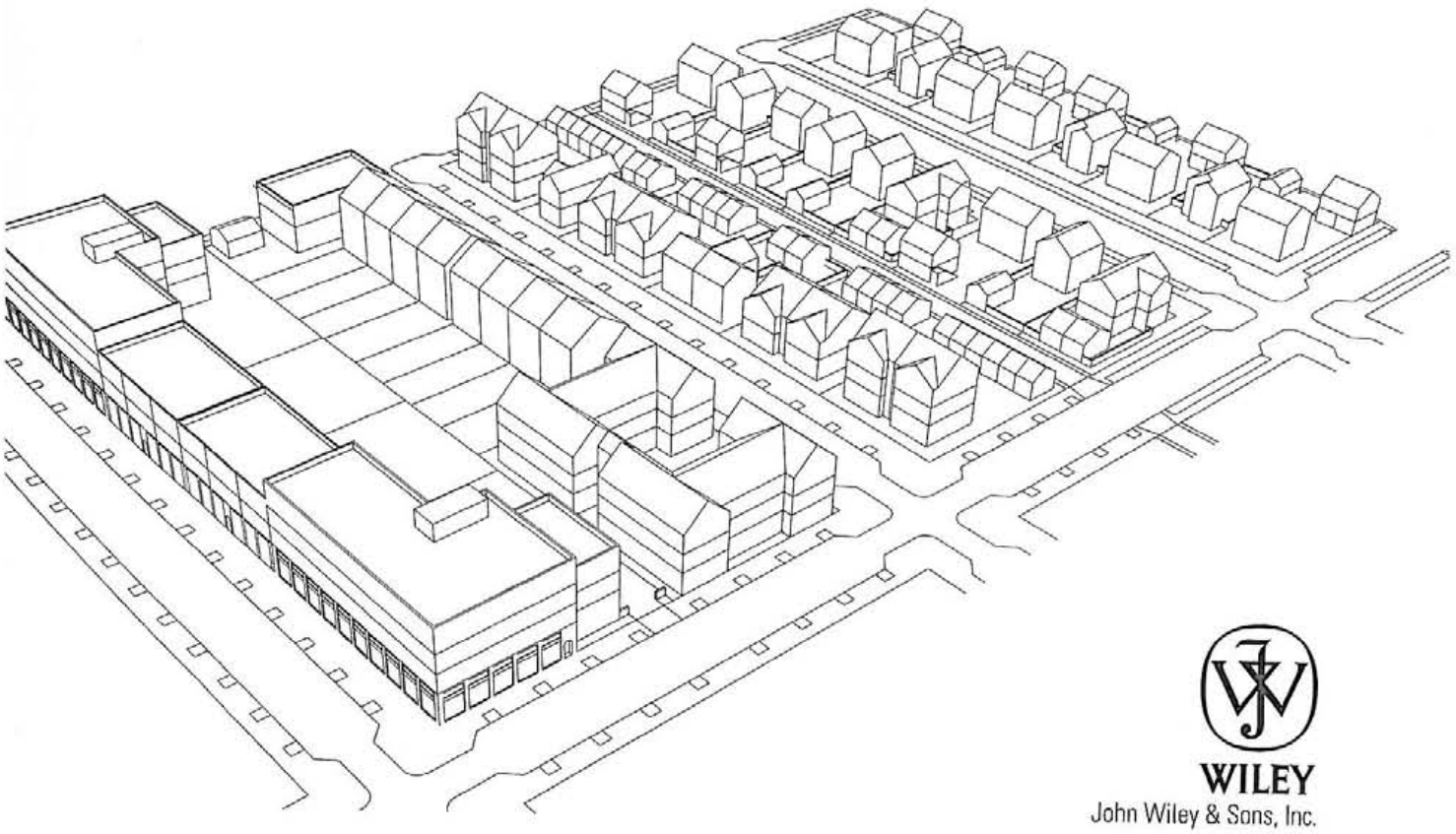
http://www.pedshed.net

http://www.completestreets.org

Form-Based Codes

A Guide for Planners, Urban Designers, Municipalities, and Developers

Daniel G. Parolek
Karen Parolek
Paul C. Crawford



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The Time Is Now

A Foreword by Stefanos Polyzoides

The urbanist traditions of our country are profound and have generated some of the most livable, prosperous, and equitable cities ever built in the world. This is a continent settled by immigrants of limited means. Yet its villages, towns, and cities flourished and developed well into the twentieth century, possessing a distinctive American character.

Early settlements, whether French (Biloxi and New Orleans), Spanish (Los Angeles, San Antonio, and Santa Fe), or English (Savannah, Philadelphia, and Charleston) were diverse in form but similar in principle. Unlike their European precedents, American settlements were founded under the expectation of speculative growth and profit. They were, therefore, organized under a different set of common principles than the towns of the Old World.

Hope and hype have been forms of currency and items of faith in American city-building from the beginning. Our traditional urban form was open-ended rather than predetermined. Town founders typically projected grids of streets, blocks, and lots without a fixed vision of a built outcome.

The process of completion in American towns was driven by incremental development, not holistic implementation. Individual interests were often in conflict with the common good.

Initially, the political process that regulated American urban growth was reciprocal. The property owner's right to build was absolute, but the entitlement to a particular project was relative and changeable over time. People gave their consent in promoting urban change on

the assumption that their future requests for action would be similarly honored.

An American aesthetic emerged that reflected the necessity for permanence. The definition and repetition of a menu of desirable, successful building and place types were the norm. The visual prominence and imperial character of monumental composition was uncommon in North America until recently. The market drove the development process more than any overarching source of authority.

Citizen-pragmatists largely led the growth of American cities. There were few rules and fewer public meetings. There was trust in expertise and common sense. Can-do attitudes permeated every physical improvement decision. This clarity of purpose can be traced through every type of early American settlement, from the smallest to the most complex, from the most rural to the most urban.

The foundation urbanism on this continent was lightly regulated for almost 400 years, and until approximately 1920. It produced places of extraordinary character that are in many ways the basis of our American identity today: Manhattan, Kennebunkport, St. Augustine, Kansas City, Santa Barbara, and countless more.

In the aftermath of the Civil War, the country began to industrialize at a dizzying pace. The tender forms of regulation that had routinely produced harmonious settlements until this time began to falter and then fail. Inadequate parklands, poor provisions for transportation, poorly designed increased density, absence of environmental safeguards, and insensitive architectural design all produced, for the first time ever, underperforming American cities that were ugly, unhealthful, and socially and economically unredeeming.

What followed was a political crisis of unprecedented proportions. The first reaction to the faltering industrial city was an impulse to sanitize it by greening it at the center and building new suburbs at its edge. The work of Olmstead and later of the City Beautiful Movement are the best examples of this reformist urbanist agenda. With the dawn of the new century, the rate of growth, population increase, immigration, and disorderly physical change accelerated. By the 1920s, the need for new administrative instruments to control the most virulent forms of urban disarray became a pressing priority.

Zoning, as we know it today, was invented at this time. The theory behind it was sound, based on the industrialized urban conditions of the time: to separate uses, densities, and incompatibilities of all kinds in order to contain the most toxic among them. Like all good ideas, this one soon evolved by grafting itself to the dominant trends of its time, only to eventually become itself a kind of virus promoting disorderly urban growth. How did that come to pass?

From Europe came the contributions of the International Congresses for Modern Architecture (CIAM) beginning in the late 1920s. Inspired and led by Le Corbusier, the French-speaking Swiss architect and urbanist, internationalist modernists sacrificed the traditional city to the automobile by radically expanding and isolating right-of-ways, vertically separating people and vehicles, rejecting the importance of figural public space, radically expanding the size of city blocks, abandoning traditional architectural typologies, and isolating uses.

From the United States came post–World War II sprawl. Fueled by homogeneous production housing tracts, ugly commercial strips, and isolated high-rise buildings, and enabled by highway and freeway construction, Ameri-

can growth produced unprecedented congestion, ugliness, impermanence, and petroleum dependence.

By its immense size and modernist structure and character, the out-of-control modernist metropolis has eclipsed the settlements of all of humanity's past. There is no continent, region, or culture that has been spared cancerous, accelerating growth by abandonment, or single-use sprawl and hyper-concentration.

By default, the form of regulation that has managed and sustained this kind of untenable worldwide urban development and redevelopment is zoning. Zoning has morphed and changed over three generations, yet one thing is plainly clear. The performance of zoning over the last three quarters of a century has been a key factor in the displacement of the hallowed principles of American traditional urbanism by a tepid, project-centered, anti-urban internationalism. Harmonious urban growth cannot be properly guided by it. There is an emerging consensus that it is instead the weapon of choice by which chaotic urban form has come to prevail in the world in all of its pathological details. The sense of American pragmatism and fair dealing is offended by this gross failing.

This book is written to describe Form-Based Codes (FBCs), a method of regulating and coding, in support of another kind of urbanism—one that promotes place-based planning and development, not suburban or urban sprawl.

Since 1990, urbanists representing all key professions with a stake in the human habitat have banded together into the Congress of the New Urbanism (CNU). Their explicit purpose is to reform development and planning practice in the United States and the world. By mid-2007, this organization had been joined by an astounding 3,250 people. The imperative being sought by the CNU and its members is that cities become once again livable, prosperous, socially enabling, and beautiful. Their agenda reflects both the fundamental purposes and the emerging boldness of urbanism on the ascendant.

The Charter of the New Urbanism provides the necessary principles for visioning traditional urban form. At the core of this theory are found the directions to addressing the two fundamental challenges underlying all urbanism: How are settlements to be founded, and how are they to be managed over time in order to evolve and thrive to maximum advantage? The kind of sustainable urbanism that is practiced through the Charter of the New Urbanism aims at disciplined, varied, and permanent urban growth: forming walkable, type-diverse, and use-flexible buildings and urban places; slowing the consumption of resources; minimizing damage to the environment; and securing the agricultural countryside and nature.

Form-Based Codes have emerged as the preferred instrument for implementing new urbanist ideas of all scales and in all settings: greenfield, brownfield, infill, and both public and private projects. Many codes are already being written to secure the form and performance of municipalities and counties all over the United States.

The practice of such Form-Based Coding is centered on a theory, a process, and a format. The theory and process are common to all practitioners. The format is particular to each.

Three new urbanist tools among many others have become the necessary ingredients for the practice of Form-Based Coding: the transect; spatial organization by neighborhood, district, and corridor; and entitlement by type.

The transect describes the power of urbanism to produce immersive environments in which buildings, open space, landscape, and infrastructure are combined to produce memorable, permanent places. It describes a spectrum of choices of development intensities from urban to rural. As a means to coding, it allows the deciphering and validating of existing settings, and promotes the design of new ones as integrated physical places, not disconnected ones.

The geography of neighborhoods, districts, and corridors replaces the endlessness of sprawl with the idea of regulating within clear, identifiable spatial boundaries. This tool promotes physical variety and the presence of a rich array of uses, activities, and services within pedestrian and transit sheds. It encourages the market to accommodate many kinds of households, while minimizing dependence on the automobile as the only mobility option. As identifiable communities of common interests, people who live within neighborhoods can then be actively involved in the management of their immediate surroundings.

Organizing entitlements by building type restores Architecture to its honored place at the center of city-making. Architecture is framed in terms of generative patterns of dwelling form, not abstract metrics. Repeating these patterns as single-family houses, row houses, courts, commercial blocks, etc., generates a distinct building fabric, specific and unique to each urban setting. Some fabric can be homogeneous. Others can be diverse and highly mixed. By connecting the legal right to build with design in known and inherently compatible forms, cities can be grown that possess character specific to their culture and history.

The process common to Form-Based Coding is vision- and charrette-centered. FBCs are intentional, and they are directed to guide future growth that is particular and desirable to each community. To this end, charrettes convene professionals in many fields in one place. Urban and architectural projects of remarkable depth are then designed by them in a compressed time frame, typically a week. Charrettes engage the community, city staff, and elected officials to respond to real and diverse needs, to inspire confidence overall, and to help in project implementation. They help build consensus and political confirmation by educating participants on how to seek a balance between their best private interests and the public good. Civic engagement, fairness, and rapid resolution of private/public conflicts are often the common consequence of a well-run charrette and the foundation of a transforming Form-Based Code.

The format for FBCs may vary from jurisdiction to jurisdiction, project to project, or office to office, yet the intentions underlying the construction of these codes are remarkably similar. They are all extensively illustrated, brief, and succinct. They are typically understandable by all those with a stake in urban development: landowners, developers, councils, and commissions, and all the professionals that advise them. They are printed in large size so that their provisions can be clearly understood and assigned to particular properties.

The key difference between FBCs and conventional zoning is the relegation of regulation by use to a position ancillary and secondary to form. That is as it should be. The evidence over the centuries is overwhelming that as economies evolve, the shell of the world's most desirable cities and their buildings remains relatively stable. It is the uses they accommodate that change continually. The disposable project is a passing aberration of the twentieth century. The wealth of all nations is embodied, more than in

any other way, in the constant investment, the lavishing of resources, upon their permanent buildings and cities.

Despite significant variations in the practice of Form-Based Codes, there is an emerging consensus on a common approach. The following are descriptive terms illustrating the key principles for guiding code-writing toward sustainable urban development:

1. Vision-Centered

Form-Based Codes are always written as part of a Master Plan. They are the outcome of a planning process that binds private and public interests onto a common vision for a desirable future. As a result, they are adopted with the complete confidence of elected and appointed officials, staffs, and the community.

2. Purposeful

Conventional codes are unfocused. FBCs are priority-driven and concentrate on regulating with an emphasis on those places that are prone to change. The kinds of physical adjustments that would render these places more useful and beautiful are clearly spelled out.

3. Place-Based

All code prescriptions are carefully calibrated to be specific to the setting to which they apply. The analysis of existing natural, physical, and social conditions within a project area is the point of departure for FBCs. Physical diversity is favored and guaranteed by providing for a wide variety of potential development and conservation intensities.

4. Regionally Diverse

The "one-size-fits-all" nature of zoning is replaced by a commitment to difference. FBCs reflect the environmental and cultural conditions prevailing in the different parts of our country and aim to encourage place-making that is appropriate to them. This specificity to regional context has profound environmental consequences, as the form and performance of buildings and cities are fitted to their climate, resources, and culture.

5. Consequential

Urbanism is not an exercise in beautification. It is an economic-development engine. Form-Based Codes typically deliver a strategy for improvement calibrated to the local economic opportunities that the market can deliver. They are operated in the interest of bolstering the fiscal health of the community.

6. Precise

FBCs are typological in nature. Concrete, experience-derived metrics replace abstract gauges of future development, such as Floor-Area Ratios (FARs). Ranges of preferred types for designing open space, landscape, buildings, and roads are prescribed in terms of concrete, familiar dimensional ranges. Growth by type guarantees compatibility among buildings and all other city-making ingredients as it operates within an understandable range of replicable models. Within this framework, the more one builds, the better the city gets.

7. Integrated

The professional autonomy that is built into so much of current planning and development practice has resulted in a process in which individuals end up working at odds with community interests. Building projects dominate, and they are often as big as possible and often deny the public realm, the multimodal use of right of ways, or the formation of an urban tree canopy. FBCs are set up to coordinate infrastructure, thoroughfares, buildings, space, and landscape design as they apply to a single project. Each project incrementally, and in accordance

to its scale, completes all five dimensions of city building.

8. Binding

FBCs are cast in terms of standards that are obligatory, not guidelines that are optional. Standards provide development direction proactively and reward adherence to the community vision that they represent. Following the standards appropriate to a project speeds up the process of getting it entitled. As citizens begin to trust that their code routinely generates harmonious fabric, the contentious nature of the current planning process is diminished. Uncertainty about neighbors' intentions is minimized.

9. Comprehensible

Zoning documents have evolved into massive, complicated, mostly written tomes that are often difficult to read, internally contradictory, and impossible to understand. FBCs aim to be simply presented in a balance of words, diagrams, and tables that are clear to common folk, landowners, developers, and professionals without the need for theological interpretation from lawyers or expediters.

10. Adjustable

FBCs should be revisited regularly and be calibrated in the light of an evolving economy, changing community objectives, and the concrete evidence represented by work completed under their provisions. They are typically so explicit and detailed that changes small and large can be made without a fuss. A community can come to control its destiny with confidence. Currently, FBCs are being incorporated into project Master Plans and area-wide Specific Plans. Increasingly, the coding of whole cities and even counties is leading in the direction of casting General Plans (Comprehensive Plans in various states) in a new urbanist frame. Jurisdictions that have engaged in a visioning process delivering a General Plan including an FBC and appropriate environmental analysis should consider exempting individual projects from further environmental review. Such a code would also introduce a stricter and more effective level of regulation. As a matter of course, projects would be entitled more rapidly and with less scrutiny than zoning-fueled current, conventional development.

A sustainable world depends on the definitions of architectural and natural forms that in their urbanism promote rich living experiences, permanent and resource-efficient designs, limited maintenance, and reduced automobile-based mobility. This is the most conclusive response to the inconvenient truth of global warming.

This volume describes in clear argument and significant detail the issues and techniques associated with the design and management of FBCs as an antidote to zoning and sprawl. Reading it and putting it to practice is an excellent point of departure for individuals and municipalities to safeguard and to grow their communities.

~Stefanos Polyzoides, Architect and Urbanist